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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,306	02/28/2002	Lawrence Lam	PALM-3748.US.P	2073
7590	11/08/2004		EXAMINER	
WAGNER, MURABITO & HAO LLP Third Floor Two North Market Street San Jose, CA 95113			LEFLORE, LAUREL E	
			ART UNIT	PAPER NUMBER
			2673	

DATE MAILED: 11/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/087,306

Applicant(s)

LAM, LAWRENCE

Examiner

Laurel E LeFlore

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date, _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Specification

1. The amendment filed 7 July 2004 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: Page 12, third new paragraph, newly discloses, "A user interface button 95 can be used, for example, to turn the device on and off in one embodiment of the invention."

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Objections

2. Claim 15 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 15 recites, "A portable electronic device as described in Claim 10 wherein said plurality of mid-segments are hollow." However, claim 10 further depends on claim 9, which newly recites "a plurality of hollow mid-segments".

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-16 and 18-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu 5,584,195 in view of Moller et al. 5,889,512.

5. In regard to claims 1, 9 and 19, Liu discloses a pen comprising an elastic member and a plurality of mid-segments coupled to the elastic member between first and second end caps. See figures 9 and 15 and column 6, lines 55-57, disclosing, "There are a few free sections 58 for covering a spring 60 which provides elasticity". Note in figure 9 that the mid-segments (sections 58) are between first and second endcaps (32 and 64). See further mid-segments (element 38) in figures 3-8. Note elements 38 in figures 3-8 are also between first and second endcaps and coupled (connected by a link) to the elastic member (within element 36).

Also note in figure 9 is depicted a first end cap tapered to a point (32) and coupled to the elastic member (as they are connected by a link) and a second end cap (64) also coupled (connected by a link) to the elastic member.

Liu further discloses that the plurality of mid-segments are hollow. See element 58 in figures 9 and 10. Element 58 is understood to be hollow because components 60 and 62 are within element 58, as shown in figure 15. Also note in figure 10 that element 38 is depicted and is hollow.

Liu does not disclose that the pen is a stylus for use with a touch screen having a digitizer.

Moller discloses a stylus for use with a touch screen having a digitizer. See column 3, lines 48-53, disclosing, "the present invention is well suited for...for example, a touch tablet for inputting strokes into a computer system". Moller teaches in column 2,

Art Unit: 2673

lines 21-24, "A pen-based computer system is typically a small, hand-held computer where the primary method for inputting data includes a 'pen' or stylus." Muller further discloses in column 1, lines 54-58, "What is needed is a stylus for a portable computer or similar electrical apparatus which...can be stored compactly and yet is of sufficient size that it is comfortable to use."

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Liu's pen by making it a stylus, as in the invention of Moller et al. One would have been motivated to make such a change based on the teaching of Moller that a stylus is a "pen". Thus, one would be motivated to use the design of a pen in making a stylus. Further, Moller teaches that "needed is a stylus for a portable computer or similar electrical apparatus which...can be stored compactly and yet is of sufficient size that it is comfortable to use", such as the pen of Liu.

6. Further in regard to claim 9, Moller discloses a portable electronic device comprising a processor, memory, and a touch sensitive display screen coupled to a bus, and a stylus. See column 1, lines 41-48, disclosing, "the invention will be described in connection with a portable pen-based computer system, such as a Newton PDA...the present invention is also suitable for other types of pen-based computers...in which input can be entered by contacting a stylus on a surface." A PDA and a computer inherently contain a processor, memory and bus. Further see column 3, lines 63-65, disclosing, a display assembly suitable for use with the stylus of the present invention can be both an input and an output device." Further see column 4, line 13, disclosing

Art Unit: 2673

an LCD and input membrane. Thus a touch sensitive display screen and stylus are disclosed.

7. Further in regard to claim 19, Liu discloses that the pen is bendable. See the figures.

8. In regard to claims 2, 10 and 20, Liu discloses that the mid-segments are operable to interlock with each other, the first end cap and the second end cap to form a rigid member. See column 7, lines 21-25, disclosing, "The detail structures of the sections 38 are best shown in FIG. 10. Each section has two different ends: a protrusive end 70 and a depressed end 72, which matches another protrusive end of the next section, so that all the sections 38 in a barrel are properly matched." Thus, the mid-segments are operable to interlock with each other. Note in figure 6 that the mid-segments interlock with the first end cap. Also note in figures 2, 9 and 15 that the mid-segments interlock with the second end cap 64 (of element 36).

9. In regard to claims 3, 11 and 21, Liu discloses in the figures that the pen is operable to become flexible when the first end cap is pulled away from the second end cap to disengage interlocking members of the mid-segments and the first and second end caps. Note in the figures that when the pen is depicted in its bent (flexible) state (such as in figures 3, 4, 6, and 10), the mid-segments are partially separated from each other, become a series of joints. Thus, the end caps are pulled away from each other and the interlocking mid-segments are disengaged. In column 7, lines 35-45, Liu discloses a turning section 56 that is operated to "interchange between stiff and flexible". However, it is understood, that after using such turning section 56 to unlock

Art Unit: 2673

the pen from its stiff state, it is the separation of the end caps and mid-segments, as depicted in the figures, that causes the pen to become flexible.

10. In regard to claims 4, 12, 22, Liu discloses that the elastic member is a spring. See rejection of claim 1.

11. In regard to claims 5, 13 and 23, Liu in view of Moller discloses an invention similar to that which is disclosed in claims 5, 13 and 23. Liu in view of Moller does not disclose that the elastic member covers the outside of the stylus.

However, Liu discloses in column 4, lines 32-, "Partially reinforced flexible barrel 34 is such a pen barrel that can be bent towards at least one side of the barrel freely, in order to form a circle or to stretch again into a straight pen. The flexibility, in this embodiment, results from sectionalization of the barrel; concretely, partially reinforced flexible barrel 34 comprises a plurality of rigid tubular sections 38a, and a reinforcing member 40a...The reinforcing member of material is flexible laterally but substantially rigid under longitudinal tension. Therefore the partially reinforced flexible barrel 34 has only one flexible side".

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Liu by having the elastic member cover the outside of the stylus, like the reinforcing member 40a of Liu. One would have been motivated to make such a change in order to make the stylus flexible, as the reinforcing member 40a gives the flexible barrel 34 "one flexible side". Further, there is no disclosed criticality of having the elastic member cover the outside of the stylus rather than be in the middle of the hollow mid-segments, and the elastic member covering the

Art Unit: 2673

outside of the stylus is functionally equivalent to having the elastic member in the middle of the hollow mid-segments. Thus, having the elastic member be an internal spring or an external cover is a matter of design choice, as is any change in form or shape (In re Dailey, 149 USPQ 47 (CCPA 1976)) or shift in location of parts (In re Japikse, 86 USPQ 70 (CCPA 1950)).

12. In regard to claims 6 and 14, Liu discloses that the pen locks together by twisting the first end cap relative to the second end cap. See figure 9 and column 7, lines 49-51, disclosing, "turn the turning section 56 for another 180 degree...the pen becomes straight form". As turning section 56 is a component in the link between the first and second end caps, it is understood the first and second end caps are twisted relative to each other with the twisting of turning section 56.

13. In regard to claims 7 and 15, Liu discloses that the plurality of mid-segments are hollow. See element 58 in figures 9 and 10. Element 58 is understood to be hollow because components 60 and 62 are within element 58, as shown in figure 15. Also note in figure 10 that element 38 is depicted and is hollow.

14. In regard to claims 8, 16 and 24, Liu discloses that the elastic member is a spring and the spring comprises hooks on both ends and is located inside the hollow mid-segments. See rejection of claim 1. Further see figure 15, depicting the spring 60 located inside the hollow mid-segments 58. While Liu does not disclose that the spring comprises hooks on both ends, Liu discloses in figure 15 and column 6, lines 61-67, "Inside of the turning section 56, at least 2-3 snap-on points 66a are made near the base of the inner wall, for the head of spring 60 to click on. Another set of snap on

Art Unit: 2673

points 66b are made on the base of spring support rod 62 for the tail of the spring to click on. Thus, with spring 60, and the connection means 36 is strung up an elastic piece as a whole." Spring hooks are inherently implied in this configuration, as both of the spring ends attach to snap on points.

15. In regard to claim 18, Moller discloses that the portable electronic device is a PDA. See rejection of claim 9.

16. In regard to claim 25, Liu in view of Moller discloses an invention similar to that which is disclosed in claim 25. See figure 9 and the rejection of claim 1 disclosing that the elastic member is a spring 60. A spring is a tube. Liu in view of Moller does not disclose that the tube is clear. However, the color of the elastic member is a matter of routine design choice and there is no disclosed criticality of the elastic member being clear. Further, transparency is simply a design option and not part of the operability of the device, and it would have been obvious to one of ordinary skill in the art at the time the invention was made to have components with transparent properties for marketing or other non-functional options. In re Seid, 73 USPQ 431 (CCPA 1947), states "Matters relating to ornamentation only, and having no mechanical functions, cannot be relied on where claims are not directed to design but are structural claims".

17. In regard to claim 26, Liu in view of Moller discloses an invention similar to that which is disclosed in claim 26. See the rejection of claim 1 for similarities. Liu in view of Moller does not disclose that one or more of the plurality of mid segments is a different color. However, the color of the mid segments is a matter of routine design choice and there is no disclosed criticality of the mid segments being different colors. Further, color

Art Unit: 2673

is simply a design option and not part of the operability of the device, and it would have been obvious to one of ordinary skill in the art at the time the invention was made to change color for marketing or other non-functional options. In re Seid, 73 USPQ 431 (CCPA 1947), states "Matters relating to ornamentation only, and having no mechanical functions, cannot be relied on where claims are not directed to design but are structural claims".

18. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Liu 5,584,195 in view of Moller 5,889,512 as applied to claims 9 and 10 above, and further in view of Brewer et al. 2003/0151982 A1.

19. In regard to claim 17, Liu in view of Moller discloses an invention similar to that which is disclosed in claim 17. See rejections of claims 9 and 10 for similarities. Liu in view of Moller does not disclose that the stylus can be stored simultaneously along more than one side of the portable electronic device.

Brewer discloses an invention in which a stylus can be stored along more than one side of a portable electronic device. See paragraph [0056], disclosing, "The stylus 1000 is made of a flexible material which will flex to match the curvature of the watchband 1006 in which it is stored when the watch is being worn by the user." Further see the stylus stored around such a curve in figures 10 and 11.

Brewer further teaches in paragraph [0053], "Incorporating a touchscreen into a wearable device such as a wrist watch is not difficult, but on a wrist watch device there is little space to store a hard plastic stylus several inches in length. The following figures illustrate several innovative stylus concepts that provide user way of inputting

Art Unit: 2673

information on the touchscreen, and styluses that can be integrated into the wearable device for storage when not in use.”

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Liu in view of Moller by having a stylus that can be simultaneously stored along more than one side of the portable electronic device, as in the invention of Brewer. One would have been motivated to make such a change based on the teaching of Brewer that such a stylus is useful for integrating into a device for storage when there is little space to store a hard plastic stylus several inches in length.

Response to Arguments

20. Applicant has amended the drawings and specification to overcome the previous objections to the drawings and specification of Paper No. 4. Previous objections to the drawings and specification are withdrawn.

21. Applicant has amended the claims to overcome the 35 USC 112, second paragraph, rejections of Paper No. 4. The 35 USC 112, second paragraph, rejections of claims 16 and 24 are withdrawn.

22. Applicant's arguments filed 7 July 2004 have been fully considered but they are not persuasive.

23. Applicant argues, for example on page 10, that “using the pen of Liu on a touch screen would damage the screen and make the screen inoperable” and “Moller teaches away from the claimed limitations of the present invention by teaching a rigid stylus that

is not elastic". However, the examiner points to the use of Moller to teach a stylus and the use of Liu to teach an elastic pen structure, as in the above rejections.

Therefore, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

24. In regard to applicants arguments on page 12, see the rejection of the newly amended claim 17 above.

Conclusion

25. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Varveris 6,249,277 B1 discloses a flexible stylus.

26. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

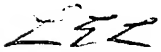
Art Unit: 2673

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laurel E LeFlore whose telephone number is (703) 305-8627. The examiner can normally be reached on Monday-Friday 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (703) 305-4938. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



LEL
3 November 2004


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ART UNIT 2673